Attorney Docket No.: ARC 01.002

## **REMARKS**

The present remarks are in response to the Office Action dated June 15, 2005, in which the Examiner rejected claims 1-20. The Applicant has amended claims 1, 9 and 13. The Applicant respectfully responds to the Examiner's Detailed Action and requests the Examiner place all claims detailed in the application in a state of allowance.

## A. Withdrawal of Finality of Rejection

In the Office Action dated June 15, 2005, the Examiner *finally rejected* claims 1-20. If an Applicant files a Request for Continued Examination in a timely manner as set forth in 37 CFR 1.17(e) with a submission, the Office will withdraw the finality of any Office Action to which a reply is outstanding and the submission will be entered and considered. See 37 CFR 1.114(d)

The applicant herein submits the required fee, and provides a good-faith attempt to reply to the final action. Thus, the Applicant requests that the Examiner withdraw the finality of the Office Action dated June 15, 2005 regarding the above referenced patent application.

## B. Objections to Claims

In the Office Action dated June 15, 2005, the Examiner has objected to claim 9 because of the following informalities: In the 6<sup>th</sup> line, one of the consecutive terms "strip" should be deleted. The Applicant has amended claim 9 as requested.

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## C. Claim Rejection Under 35 USC 103

The Examiner has rejected claims 1-20 as being unpatentable over Burden, U.S. Patent 3,243,568 (hereinafter referred to as "Burden") in view of Wada et al., U.S. Patent No. 4,208,564 (hereinafter referred to as "Wada"), and further in view of Saito et. al, Japanese Patent 3-297587 (hereinafter referred to as "Saito"). Applicant respectfully disagrees with the Examiner's arguments.

As stated in Section 2143 of the MPEP:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. Section 2143, MPEP Rev. 2.0, May 2004, pg. 2100-129.

The Applicant submits that the amended independent claims 1, 9 and 13 each include, *inter alia*, the limitation that, "at least one of said plurality of insulator modules configured to provide enough clearance within a weld gap for said consumable guide tube to oscillate." As stated above, to establish a prima facie obviousness rejection, the Examiner's prior art must teach or suggest all claim limitations.

Regarding amended claims 1, 9 and 13, the Examiner cites Wada and Burden and argues that it would have been obvious to one of ordinary skill in the art to add a plurality of insulator modules to prevent a short circuit. The Examiner additionally cites Saito as disclosing an assembly comprising a flux ring and consumable nozzle for preventing swing in the electroslag welding. Notably, Saito

describes the assembly having an insulating spacer. The Applicant submits that Burden in view of Wada, and in further view of Saito teaches insulating spacers that are, by design, prohibitive of the oscillation described in the applicant's patent application. More specifically, the very purpose of the insulating spacers of the prior art are, "to prevent swing of a consumable nozzle," or "tip part," (Saito) and, "to prevent a short circuit in the weld gap" (Wada, Col 3, Lines 41-42). Furthermore, Burden, Wada and Saito fail to teach the oscillation technique described in the Applicant's patent application, *inter alia*, on page 25, lines 14-19:

At block **460**, after the weld cycle is initiated the electroslag process is initiated when a welding arc is struck in the sump. Weld flux is added to the welding arc until the flux is molten and forms a slag which rises to the bottom of the guide tube and extinguishes the arc. Once the electroslag process is underway, the insulators on the guide tube allow the guide tube to be oscillated to spread the weld metal to the full width of the substrate as shown in block **462**.

Regarding claims 1, 9, and 13, Burden in view of Wada and in further view of Saito fails to teach or suggest a consumable guide tube that is configured to oscillate comprising a first elongated strip, a second elongated strip, and a plurality of insulator modules. More specifically, Burden, Wada, and Saito fail to teach or suggest, *inter alia*, at least one insulator module that is configured to provide enough clearance within a weld gap for the consumable guide to oscillate as described above. Additionally, Saito describes "insulator modules" configured "to prevent swing of a consumable nozzle," which lends itself to hindering the very oscillation method that is described by the Applicant. Furthermore, in accordance with the Office Action, Burden in view of Wada fails to teach, *inter alia*, the insulator modules to provide functionality other than the prevention of short circuits. Further still,

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Burden in view of Wada fails to teach or suggest the aforementioned oscillation

method.

Therefore, the limitations of claims 1, 9 and 13 are not taught or suggested by

Burden in view of Wada, and in further view of Saito. Since the independent claims

1, 9 and 13 overcome the 35 USC §103 rejection, the Applicant respectfully requests

that each of the dependent claims 2-8, 10-12, and 14-20 respectfully, overcome the

obviousness rejection.

Conclusion

For all the forgoing reasons, withdrawal of the finality of the rejection of the

present Office Action and allowance of 20 is respectfully requested.

Respectfully Submitted;

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